Amendments to the claims:

1. (Currently Amended) A method of determining a position of an unknown point in space using at least two cameras aimed to have a substantially overlapping field of view, comprising the steps of,

generating in each of said cameras an image corresponding to at least four points lying in a reference plane, the reference plane being common to the respective images of the cameras;

calculating a planar projective transform that maps said images of said at least four points to a reference frame, said reference frame being a projection of said reference plane;

generating, in each of said cameras, images of at least two calibration markers whose positions relative to said reference plane are known and an image of an unknown point;

for each of said images of said at least two calibration markers and said image of an unknown point, applying said transform to define respective points in the reference frame ~~a plane of said image~~; and

computing at least a distance of said unknown point from said reference plane responsively to ~~at least a depth of said unknown point and coordinates of said unknown point and said at least two points transformed into~~ said points defined in said reference frame for said markers and said unknown point.

2. (Currently amended) A method as in claim 1, wherein said step of computing includes computing a distance of said unknown point from said reference plane responsively to positions of said calibration markers ~~points~~.

3. (Currently Amended) A method as in claim 2, wherein said positions indicate a distance of said calibration markers ~~points~~ from said reference plane.

4. (Currently Amended) A method as in claim 1, wherein said step of generating said image of said calibration markers includes positioning said calibration markers in said overlapping field of view.

5. (Original) A method as in claim 4, wherein said step of positioning includes extending a boom with said markers.

6. (Currently amended) A method as in claim 1, wherein said position of each calibration markers includes only a distance from said reference plane.

7. (Currently amended) A strap-down three-dimensional reconstruction system, comprising:

a jig supporting at least two cameras;

said jig having a structure to support at least two calibration markers in a position to be substantially visible by said at least two cameras; and

said jig also supporting at least four reference markers in a visual field of each of said at least two cameras, all of said reference markers lying in a common plane~~;~~

~~wherein said at least two cameras are used to determine a position of an unknown point in space according to the method of claim 1~~.

8. (Original) A system as in claim 7, wherein said four reference markers are corners of an aperture in a screen of said jig.

9. (Original) A system as in claim 7, wherein said four reference markers are projected onto a screen.

10. (Original) A system as in claim 7, further comprising an image processing

computer connected to receive said images from said cameras and programmed to calculate a position of a point visible in each of said cameras responsively to position data corresponding to said calibration markers.

11. (Currently amended) A method of determining a position of an unknown point in space using at least two cameras aimed to have a substantially overlapping field of view, comprising the steps of,

generating in each of said cameras an image corresponding to at least four points lying in a reference plane, the reference plane being common to the respective images of the cameras;

calculating a planar projective transform that maps said images of said at least four points to a reference frame, said reference frame being a projection of said reference plane;

generating, in each of said cameras, images of at least two calibration markers whose positions relative to said reference plane are known;

transforming, by said planar projective transform, each of said images of calibration markers;

computing optical centers of said cameras responsively to a result of said step of transforming;

generating in each of said cameras an image of an unknown point and calculating a position of said unknown point responsively to a result of said step of computing.

12. (Original) A method as in claim 11, wherein said step of calculating includes transforming said images of said unknown point using said planar projective transform.

13. (Currently cancelled)

14. (Currently cancelled)

15. (Currently cancelled)

16. (Currently cancelled)